SCH4U Organic Nomenclature - Guidelines

Structure ⇨ Name

1. Identify functional groups.
2. Find the longest continuous carbon-carbon chain containing the highest priority functional group.
3. Assign numbers to the Root chain so that there is the lowest number set possible **but** from alcohols to carboxylic acids assign numbers so that the highest priority functional group has the lowest number possible.
4. Write the side chains in either alphabetical order or from least to most complex.
5. Assign a carbon number to each side chain unless there is only one possible structure, then omit the numbering.

Notes:

- Treat alkyls to amines as side groups of the alkane root.
- Functional groups that modify the Root chain have numbering priority.
- If there is only one side group on a ring structure do not number it but with two or more side groups all must be numbered.
- Carbonyl carbon (C=O) is C_1 for aldehydes and carboxylic acids.

Name ⇨ Structure

1. Draw the Root chain.
2. Identify functional groups with care to modification of the root chain name.
3. Number the Root chain and draw in side groups attached to the correct carbon.

Notes:

- Ensure C has 4 bonds, N has 3 bonds, and O has 2 bonds.
- Do not mix different types of structural drawings.